

# INSTITUTIONAL ASSESSMENT AND ACCREDITATION (Effective from July 2017)

Accreditation - (Cycle - 2)

### PEER TEAM REPORT ON

## INSTITUTIONAL ACCREDITATION OF BHARATI VIDYAPEETH'S COLLEGE OF ENGINEERING, LAVALE, PUNE C-41597

LAVALE PUNE Maharashtra 412115

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL An Autonomous Institution of the University Grants Commission P.O. Box No. 1075, Nagarbhavi, Bengaluru - 560 072, INDIA

### Section I:GENERAL INFORMATION

1.Name & Address of the	BHARATI VIDYAPEETH'S COL	LEGE OF ENGINEERING,	
institution:	LAVALE, PUNE		
	LAVALE PUNE		
	Maharashtra		
	412115		
2.Year of Establishment	2012		
3.Current Academic Activities at			
the Institution(Numbers):			
Faculties/Schools:	1		
Departments/Centres:	4		
Programmes/Course offered:	4		
Permanent Faculty Members:	41		
Permanent Support Staff:	50		
Students:	740		
4.Three major features in the	1. Private, Self-Financing and Affiliated College of a reputed		
institutional Context	management		
(Asperceived by the Peer Team):	2. Located in a rural area with	good eco system	
	3. Serving local community		
5.Dates of visit of the Peer Team	From : 25-10-2024		
(A detailed visit schedule may be	To : 26-10-2024		
included as Annexure):			
6.Composition of Peer Team			
which undertook the on site visit:			
	Name	Designation & Organisation Name	
Chairperson	DR. MOHAN BANGARU	FormerProfessor,COLLEGE OF ENGINEERING GUINDY ANNA UNIVERSITY	
Member Co-ordinator:	DR. USHA RANI KURUBA	Professor,SRI PADMAVATI MAHILA VISVAVIDYALAYAM	
Member:	DR. SATYA PRASAD LANKA	Principal,Stanley College of Engineering and Technology for Women	
NAAC Co - ordinator:	Dr. A.v. Prasad		

### Section II:CRITERION WISE ANALYSIS

Observations (Strengths and/or Weaknesses) on each qualitative metrices of the key Indicator under the respective criterion(This will be a qualitative analysis of descriptive nature aimed at critical analysis presenting strength and weakness of HEI under each criteria)

Criterion1 - Curricular Aspects (Key Indicator and Qualitative Metrices(QlM) in Criterion1)		
1.1	Curricular Planning and Implementation	
1.1.1	The Institution ensures effective curriculum planning and delivery through a well-planned	
QlM	and documented process including Academic calendar and conduct of continuous internal	
	Assessment	
1.2	Academic Flexibility	
1.3	Curriculum Enrichment	
1.3.1	Institution integrates crosscutting issues relevant to Professional Ethics, Gender, Human	
QlM	Values, Environment and Sustainability in transacting the Curriculum	
1.4	Feedback System	

Qualitative analysis of Criterion 1

Bharati Vidyapeeth's College of Engineering, Lavale (BVCOEL) was established in 2012 in the rural area ie., Lavale, Pune in Maharastra state. It is a Self-financing, Private and coeducation Institution offering four undergraduate programmes in Civil Engineering, Computer Engineering, Electronics & Telecommunication Engineering, and Mechanical Engineering. It is approved by AICTE, New Delhi, and affiliated with Savitribai Phule Pune University (SPPU), Pune.

Being an affiliated institution, it adopts the curriculum designed by the SPPU and implements the curriculum effectively among the students. The institution prepares the Academic Calendar based on the SPPU Academic Calendar related to teaching, examinations, etc., and a separate activity calendar by each department.

The performance of the students is continuously assessed throughout the semester through the internal examinations, practicals, assignments, etc.

Value added courses are also offered through MOOCs to the students of various programmes. A good number of students have taken up value-added courses.

The institution for holistic education, integrating curricular and extracurricular activities that address Environmental Sustainability, Professional Ethics, Gender Equality and Human Values. Some activities viz., sessions on Intellectual property rights and management for start-ups, Legal and ethical steps, Emerging Multifaceted Personality Women Empowerment Program, International Women's Day, Tree Plantation, are also conducted. Efforts has to be made to provide student counselling on mental health/personal issues.

The feedback collection mechanism recently automated and the analysis and action taken to be done in a formative way. The follow up measures for the analysis report has to be improved.

Criterion2	Criterion2 - Teaching-learning and Evaluation (Key Indicator and Qualitative Metrices(QlM) in Criterion2)		
2.1	Student Enrollment and Profile		
2.2	Student Teacher Ratio		
2.3	Teaching- Learning Process		
2.3.1	Student centric methods, such as experiential learning, participative learning and problem		
QlM	solving methodologies are used for enhancing learning experiences and teachers use ICT-		
	enabled tools including online resources for effective teaching and learning process		
2.4	Teacher Profile and Quality		
2.5	Evaluation Process and Reforms		
2.5.1	Mechanism of internal/ external assessment is transparent and the grievance redressal		
QlM	system is time- bound and efficient		
2.6	Student Performance and Learning Outcomes		
2.6.1	Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes offered by the		
QlM	institution are stated and displayed on website		
2.6.2	Attainment of POs and COs are evaluated.		
QIM			
	Explain with evidence in a maximum of 500 words		
2.7	Student Satisfaction Survey		

Qualitative analysis of Criterion 2

The institution following the norms of the parent university and Government of Maharastra to admit the students into the various programmes. Students' enrolment needs extensive improvement in the disciplines Mechanical and Civil engineering.

The institution is maintaining the required Student-Teacher ratio as per the AICTE norms but cadre ratio has to be maintained.

In addition to traditional teaching methods, video lectures, NPTEL lectures, PowerPoint presentations, projects, etc., are being conducted to enhance experience learning. Students are classified as slow or advanced learners based on their performance in the internal assessment. Identified slow learners are provided extra assistance and advanced learners are encouraged to participate in Hackathon and technical competitions.

Through the online LMS, which is available in college portal, the students can access PPTs, Notes, Videos, etc. Students making use of a dedicated server for NPTEL videos.

To expose students to experiential learning Industry visits and internships are arranged to the students. Participative learning also acquired by involvement in Seminars, NSS activities, participation in National/international events, sports and cultural events, etc. Problem solving methodologies such as projects, class assignments and case studies are adopted.

Teachers use ICT enabled tools and online learning resources.

Data Management Server (DMS) is available for students where subject-related study material such as PPTs, Notes, Previous Year Question Papers, and videos are available. The institution provides E-Books to the students through Library management systems.

The institute is a member of National Digital Library of India (NDLI). The vmEdulife, an ERP system is used

by the institute which assists in Teaching & Learning and administration activities.

A Mechanism is established by the institute to conduct internal examinations and also for the external examinations as scheduled by the university in a transparent way. Answer sheets of the internal exams are provided to the students after examinations and any grievances are addressed. Any grievances of the external examinations are addressed through a staff coordinator to the Parent university.

Programme Outcomes (POs) and Course Outcomes (COs) for all Programmes offered by the institution are stated and displayed on website. The institute has carried out the procedure for the subjects and follow up action is initiated.

Attainment of POs and COs are evaluated by consideration of direct and indirect parameters which has to be improved.

Criterion3 - Research, Innovations and Extension (Key Indicator and Qualitative Metrices(QlM) in		
Criterion3)		
3.1	Resource Mobilization for Research	
3.2	Innovation Ecosystem	
3.2.1	Institution has created an ecosystem for innovations, Indian Knowledge System	
QIM	(IKS), including awareness about IPR, establishment of IPR cell, Incubation centre and	
	other initiatives for the creation and transfer of knowledge/technology and the outcomes of	
	the same are evident	
3.3	Research Publications and Awards	
3.4	Extension Activities	
3.4.1	Outcomes of Extension activities in the neighborhood community in terms of impact and	
QIM	sensitizing the students to social issues for their holistic development during the last five	
	years.	
3.4.2	Awards and recognitions received for extension activities from government / government	
QlM	recognised bodies	
3.5	Collaboration	

### Qualitative analysis of Criterion 3

BVCOEL has set up SPPU E-cell and MHRD Institutions' Innovation Council (IIC) in the year 2019-20, which is an initiative of the Ministry of Human Resource Development (MHRD), Govt. of India to systematically foster the culture of Innovation among Higher Education Institutions (HEIs). Under these several activities are conducted such as mentoring, guidance, research and innovation, intellectual property etc., to encourage the students. The institution selected as one of the Mentor for Mentor-Mentee 2021-22 program of IIC, MIC and mentoring five institutes. So far, the number of Student Start-ups/Ventures established is 5.

BVCOEL Team "Deamon" won a prize worth INR 1,00,000/- at the National Level Smart India Hackathon (SIH 2022) for developing technical solutions to real-world problems. By organizing various workshops on Yoga, Marathi Divas, Mathematics Day etc., the students are exposed to the Indian Knowledge System.

The institute encourages the faculty to publish articles in various scopus /SCI indexed journals and published limited number of articles which has to be improved. Patents have been published and several are granted and steps has to be initiated by the institute towards commercialization.

The institution organized awareness programs for societal advancement in neighboring communities. The NSS engages students in social involvement by conducting various activities viz., plantation of trees, gender discrimination, save the girl child, social inequity, village cleanliness campaign, organ donation camp. A few recognitions received for extension activities carried out by the institution.

The institution has collaborations in the form of MOUs with some industries to promote the learning experience of the students through Academic Projects, Internships, Expert Lectures, etc. and to inculcate professional skills among the students.

Criterion	4 - Infrastructure and Learning Resources (Key Indicator and Qualitative Metrices(QIM) in		
Criterion	4)		
4.1	Physical Facilities		
4.1.1	The Institution has adequate infrastructure and other facilities for,		
QlM			
	• teaching – learning, viz., classrooms, laboratories, computing equipment etc		
	• ICT – enabled facilities such as smart class, LMS etc.		
	Facilities for Cultural and sports activities, yoga centre, games (indoor and outdoor),		
	Gymnasium, auditorium etc (Describe the adequacy of facilities in maximum of 500 words.)		
4.2	Library as a Learning Resource		
4.2.1	Library is automated with digital facilities using Integrated Library Management System		
QlM	(ILMS), adequate subscriptions to e-resources and journals are made. The library is optimally		
	used by the faculty and students		
4.3	IT Infrastructure		
4.3.1	Institution frequently updates its IT facilities and provides sufficient bandwidth for internet		
QlM	connection		
	Describe IT facilities including Wi-Fi with date and nature of updation, available internet		
	bandwidth within a maximum of 500 words		
4.4	Maintenance of Campus Infrastructure		

### Qualitative analysis of Criterion 4

Bharati Vidyapeeth's College of Engineering, PUNE provides reasonably adequate infrastructure and physical facilities. The institute has workshop, computer centre, library, committee room, an open air theatre for cultural activities, Gymnasium and Yoga Room, Mess and seminar hall etc. The Cafteria which is available in the institute has limited space which has to be improved. The classrooms are properly ventilated and mostly equipped with ICT. Seminar and conference halls are also available in the institute. Laboratories are sufficiently equipped with experimental facilities has to be improved by providing separate room specifically in Mechanical Department for each lab.

The institute has 13 classrooms are equipped with Digital Smart Boards with LAN and wireless facilities, and adequate furniture. The Institution has some facility for indoor games like carom, table tennis and chess. A Physical Director is appointed to look after the games and sports activities of the Institute. However, the Institution should strengthen the facilities for the outdoor games.

The Central Library of Bharati Vidyapeeth's College of Engineering has Reference Section, Reading Hall and Stack-Room Stack Area, Periodical Section, Digital Library, Group Study Area, and Reading Hall. This

library has collection of books required for the students' needs but lacks Rare Books, Manuscripts and Special Reports. The library also hosts a digital library with e-resources, e-books, and e-journals, a Local Study Material Server, NPTEL Video Lectures Server.

Digital Library of this institute is having e-resources of J-Gate, The library has a local database server where students can access the online study material uploaded by faculty and NPTEL lectures. The library is a member of National Digital Library of India-NDLI.

The library is automated with SOUL and KOHA Library Software exclusively for library operations from 2020 onwards. The average per day usage of learning resources is less which has to be improved.

The Institute has a Central Computing Facility Center in addition to the eight computer labs with a capacity of 25 systems each. The UPS backup is provided in each computer lab adequately in addition to the Generator power back up. The Institute has upgraded from 32 Mbps to 100 Mbps system for Wi-Fi and has to be enhanced. LAN which is configured is powered with a server with firewall protection which is upgraded annually.

Criterion5 - Student Support and Progression (Key Indicator and Qualitative Metrices(QlM) in Criterion5)		
5.1	Student Support	
5.2	Student Progression	
5.3	Student Participation and Activities	
5.4	Alumni Engagement	
5.4.1	There is a registered Alumni Association that contributes significantly to the development of	
QlM	the institution through financial and/or other support services	

Qualitative analysis of Criterion 5

Alumni association of Bharati Vidyapeeth's College of Engineering, Pune was registered in 2018 and meets every year. This association contributions towards academic enrichment and student development of the institute in a limited way which has to be improved. Alumni contribute to the college development in the form of providing collaborative industry projects, internships and placement initiatives to students which needs further improvement. were made. Alumni needs to conduct sessions to impart knowledge of cutting-edge technologies which empower students with practical insights that extend beyond textbooks.

Criterion	6 - Governance, Leadership and Management (Key Indicator and Qualitative Metrices(QIM) in		
Criterion			
6.1	Institutional Vision and Leadership		
6.1.1	The institutional governance and leadership are in accordance with the vision and mission of		
QlM	the Institution and it is visible in various institutional practices such as NEP implementation,		
	sustained institutional growth, decentralization, participation in the institutional governance		
	and in their short term and long term Institutional Perspective Plan.		
6.2	Strategy Development and Deployment		
6.2.1	The institutional perspective plan is effectively deployed and functioning of the institutional		
QIM	bodies is effective and efficient as visible from policies, administrative setup, appointment,		
	service rules, and procedures, etc		
6.3	Faculty Empowerment Strategies		
6.3.1	The institution has performance appraisal system, effective welfare measures for teaching		
QlM	and non-teaching staff and avenues for career development/progression		
6.4	Financial Management and Resource Mobilization		
6.4.1	Institution has strategies for mobilization and optimal utilization of resources and funds		
QlM	from various sources (government/ nongovernment organizations) and it conducts financial		
	audits regularly (internal and external)		
6.5	Internal Quality Assurance System		
6.5.1	Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing		
QlM	the quality assurance strategies and processes. It reviews teaching learning process,		
	structures & methodologies of operations and learning outcomes at periodic intervals and		
	records the incremental improvement in various activities		

Qualitative analysis of Criterion 6

The Institute has adopted the Vision of the parent organization based on which it has derived its own vision and mission statements. This has further been using to decide its strategic plan and policies. The Institute has the required functional bodies in place which monitor the progress as per the guidelines provided by the different bodies like AICTE, UGC, SPPU, etc. such as Board of Governers, College Development Cell, Academic Committee as well as statutory committees like anti ragging cell, internal complaints committee, grievance redressal committee etc.

The institute has published a strategic plan on its website however this is for short term 5 years ending in 2023. this has to be updated and long-term strategic plan is also to be developed separately, for the next 10/15/20 years, separated from the vision and mission. The current plan has covered the aspects of policies, administrative setup, appointment procedure, service rules, Teaching/learning process.

The recruitment of human resources for academic and administrative purposes is transparent and controlled by the management. There are policies to empower faculty members to upgrade their competency skills through attending di?erent FDPs, Workshops, STTPs, etc. The performance of the teaching and non-teaching sta? is monitored, and recently online mechanism has been adopted by the Institute to appraise it.

Regarding mobilization of funds the Institute is heavily dependent on tution fees as its main source of income. Efforts are being made to improve mobilization of funds through other sources such as governmental agencies

The Institute follows the norms and process set by management for the preparation of the budget. It involves the different departments and cells in the process of budget preparation which attempts to implement transparency. It has policies in place for proper utilization of funds. The Institute has a mechanism to conduct Internal and External Audits to verify the ?nancial transactions and their legitimacy and has been filing its returns and the form-16 of employees regularly.

The IQAC in association with Academic Committee supports the institute to monitor and control the quality of education provided to the students. The AQARs have been prepared and submitted by the IQAC. Student feedback is taken every year to assess the teaching-learning process and present it during the meetings which are conducted at regular intervals. The IQAC also supports the institute by participating in the ranking agency (NIRF), every year. The IQAC needs to assess attainments and recommend corrective measures proactively. The IQAC committee needs to be structured in line with the NAAC guidelines.

Criterion7	- Institutional Values and Best Practices (Key Indicator and Qualitative Metrices(QlM) in	
Criterion7	$\gamma$ )	
7.1	Institutional Values and Social Responsibilities	
7.1.1	Institution has initiated the Gender Audit and measures for the promotion of gender equity	
QlM	during the last five years.	
	Describe the gender equity & sensitization in curricular and co-curricular activities, facilities for women on campus etc., within 500 words	
7.1.4	Describe the Institutional efforts/initiatives in providing an inclusive environment i.e.,	
QlM	tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and	
	Sensitization of students and employees to the constitutional obligations: values, rights,	
	duties and responsibilities of citizens (Within 500 words)	
7.2	Best Practices	
7.2.1	Describe two best practices successfully implemented by the Institution as per NAAC format	
QlM	provided in the Manual	
7.3	Institutional Distinctiveness	
7.3.1	Portray the performance of the Institution in one area distinctive to its priority and thrust	
QlM	within 1000 words	

### Qualitative analysis of Criterion 7

The Institute has progressed as per the de?ned vision and inculcating the Social, Ethical, and Professional values among the staff and students. The Institute has a strong belief in imbibing the social values among the students. It organizes Gender Equity Programs to sensitize the students about gender disparity. The institution has taken up several activities regarding gender issues. It has conducted gender audit and has constituted statutory committees like internal complaints committee, grievance redressal cell etc. There are girls' common rooms, restrooms, health centre. Sanitary pad vending and disposal machines are available in restrooms. Psychological counselling facility is available.

The institute conducts all national days along with regional celebrations. Students of various states are also studying in the institute. During cultural activities

The Institute also has demonstrated an eagerness to preserve environmental resources and hence manage the diffrent types of waste as per the standard policies. The Institute is located in a semi-rural area tree plantation initiatives have been organized regularly to move towards a green campus and the same has been audited

through the Green Audit. It also has a policy to conserve the energy through rapid introduction of utilization of LED bulbs across the campus. The NSS Unit conducts several activities beyond the campus to spread the awareness about importance of the environment.

The Institute has adopted di?erent best practices over a period which helped to improve the societal as well as professional value. There is some outreach activity also example: they have developed a MHT-CET portal which helps the HSC students to practice the tests designed by the subject experts. The Innovation Cell /E-Cell has cultivated the culture of startup and entrepreneurship among the students today, and the Institute has produced a good number of entrepreneurs for the society. After the COVID-19 pandemic, the Institute has increased the digital resources for the innovative and e?ective teaching-learning process, and this has improved not only the quality of education but also the competencies of the faculty.

The Institute has made efforts through MoUs to foster relationships with the industries and has initiated a scheme of One Faculty-One Industry. This has led to increased activity and coverage of several domains of engineering applications. Derived benefits of the above have been Industry Sponsored Projects, Internships, Placements, Expert Talks, etc.

# Section III:OVERALL ANALYSIS based on Institutional strengths. Weaknesses, Opportunities & Challenges (SWOC) (up to 500 words)

# Overall Analysis

### Strength:

The institution is run by an established management.

Pollution free environment.

Dedicated faculty with involvement.

Well-ventilated and spacious and smart classrooms.

#### Weaknesses:

Low Enrollment ratio.

Research publications and funded projects are less.

Access to the college campus by public transportation.

Improper cadre ratio and experience of the faculty members.

### **Opportunities:**

Located in a Industrial area and its potential need to be exploited.

Networking with the reputed HEIs in the region for academic excellence.

Alumni may be involved to enhance employability skills among the students.

Increase collaborations with industries for staff and students virtual training.

### Challenges:

Location disadvantage to attracts the students.

Rigid curriculum due to affiliated status.

Getting better campus Placements with top tier MNCs.

Recruiting qualified and experienced faculty.

#### Section IV:Recommendations for Quality Enhancement of the Institution

(Please limit to **ten major ones** and use telegraphic language) (It is not necessary to indicate all the ten bullets)

- Provide incentives to attract meritorious students and to improve enrollment ratio.
- Start. PG courses to improve research culture in the campus.
- On campus girls hostel needs to be established.
- The maintenance of the facilities on the campus needs improvement.
- Outdoor games facility has to be established
- To improve transportation facilities to the nearest connected location during working hours.
- The canteen needs improvement in terms of adequate infrastructure and quality food.
- A separate reference section in the library has to be provided.
- Establishment of students' chapters of professional bodies like CSI, IETE, IEI, IEEE, ACM, etc.
- Strengthen the placement cell with proper infrastructure and qualified placement personnel.

#### I have gone through the observations of the Peer Team as mentioned in this report

### Signature of the Head of the Institution

#### Seal of the Institution

Sl.No	Name		Signature with date
1	DR. MOHAN BANGARU	Chairperson	
2	DR. USHA RANI KURUBA	Member Co-ordinator	
3	DR. SATYA PRASAD LANKA	Member	
4	Dr. A.v. Prasad	NAAC Co - ordinator	

Place

Date